Potential Implementation Options

Upon acceptance of this deliverable, the CSID Core Team will proceed with the Implementation Approach Phase. During this phase, the High Level Design will be used as a basis to draft a suggested approach for the implementation of the CSID solution. The Implementation Approach Deliverable will define CSID sequencing and implementation strategy, dependencies, and key milestones for implementing the CSID Solution in alignment with the overall data strategy and business objectives.

The CSID Team has isolated three primary candidates for implementation methods of the CSID Solution. These methods could be implemented stand-alone, or in a phased approach. The Implementation Approach will be aligned with the overall Data Strategy Team and FSA Business Objectives.

System to System Use

This method places the most responsibility on the individual systems and business areas. Each system receives the logic for the algorithm in order to develop and implement the logic within the individual systems. Each system also receives standardized aliases and valid field values; however, this data is maintained and updated in a centralized location. The owner of the tables' content disseminates updates while the systems must load the newest versions in a timely manner.

The individual system owners must agree to all use of matching algorithm, and apply the algorithm accordingly. Additional matches or checks (like SSA match flags, etc.) are used in conjunction with the algorithm, at defined points in the lifecycle. Exception and would be de-centralized across all system owners.

Centralized Call

This method consolidates and isolates the CSID data from all affected FSA systems. The logic and code for the matching algorithm is maintained in a central location. Each time a system must run the algorithm, the system calls on the central location for the algorithm (e.g. the loading of new customer, changes to identifier fields). The centralized location would also publish changes and updates to the individual systems. The individual system owners must agree to all use of matching algorithm, and call the algorithm accordingly.

The appointed centralized location also contains aliases for each student/customer. The additional SSA matches are also run against this centralized location, at the request of individual systems. This option requires consideration of the impacts on performance and real-time processing for FSA systems.

Integration with Central Demographic Location

This method embeds the CSID identifier data in the larger, single repository of demographic data. With this implementation, PIN data is also incorporated with all the records that have assigned PINs. The SSA match and algorithm checks are run against

this centralized location while messages and updates are communicated to the individual systems.

If the centralized index is implemented, the systems that update or collect identifying information will be required to interface with the index in a similar manner, to send and receive updates, as well as create new customers with unique identifiers. It is acknowledged that a centralized index of identifying data may provide the most consistent updates and changes will be maintained with the implementation of centralized index, or master source for holding identifying information. In the absence of a centralized location, standard processes and business rules will dictate the mandatory updates and confirmations between systems.

Table 3. Implementation Options Scorecard

	System to System CSID	Centralized Call	Integration with Central Demographic Location
Matching Algorithm Owner	Logic remains uniform throughout; Technology developed and implemented by individual systems	Logic and technology developed and implemented in central location	Logic and technology developed and implemented in central location
History	Algorithm consults system's individual history	Algorithm consults system's individual history	Algorithm consults single central history
Alias Table & Valid Ranges	Content remains uniform throughout; distributed /loaded into individual systems	Content maintained and consulted in single location	Content maintained and consulted in single location
Change Control & Exception Processing	Dedicated resources for each FSA system	Centralized resources with individual system support	Centralized resources with individual system support
Level of Effort/Expense	Low	Moderate	High
Impact	Prevent merging/splitting of IDS	Prevent merging/splitting of IDS	Prevent merging/splitting of IDS Allows central query of all individuals demographic data Potential performance issues